

Type **TK16 H₂ High-Flow**

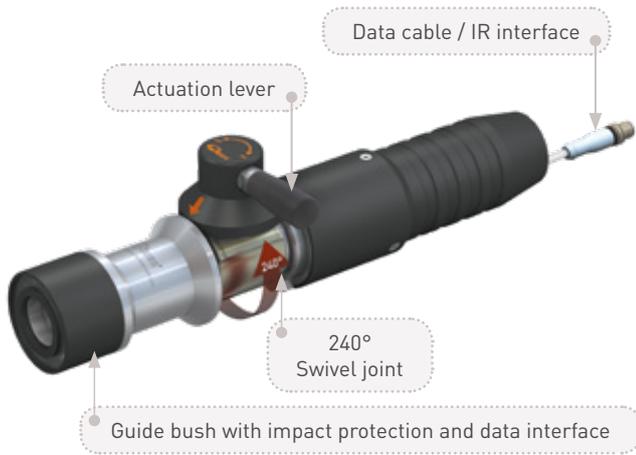
WEH[®] Fueling nozzle with data interface for hydrogen fast filling

of buses and trucks at self-service fueling stations



General

DESCRIPTION



Features

- Compatible with WEH® TN1 H₂ High-Flow and WEH® TN1 H₂ 70 MPa receptacle profile
- Integrated data interface acc. to SAE J2601
- WEH EASY-TURN® 240° swivel joint for actuation lever
- Easy operation
- Higher flow rate → shorter filling times
- Filling rate approx. 100 - 120 g/sec.
- Recirculation of the vented gas
- Plastic thermal protection
- WEH® Jaw locking mechanism
- High-grade materials
- Coding for pressure range / gas type

The WEH® TK16 H₂ High-Flow Fueling nozzle with data interface provides a faster hydrogen refueling solution for buses and trucks. An increased flow rate achieves even faster filling times.

The actuation lever is located on the integrated swivel joint making it easy to rotate into the optimal actuating position.

The actuation lever needs less effort to actuate the nozzle.

The internal coding for pressure range and gas type ensures that the TK16 H₂ High-Flow with data interface can be connected to the compatible WEH® Receptacles according to the opposite table and also prevents the risk of confusion with natural gas.

Furthermore the fueling nozzle has an interface (IR) for data transfer between vehicle and fueling station.

The WEH® TK16 H₂ High-Flow with data interface offers optimum safety to the operator. The fueling nozzle remains connected to the receptacle until the gas between inlet valve and receptacle is depressurized.

| | | TN1 H ₂ | | | |
|------------------------------|------------|--------------------|--------|------------|--------|
| | | 25 MPa | 35 MPa | 35 MPa HF* | 70 MPa |
| TK16 H ₂ HF* IR** | 35 MPa HF* | | | ✔ | ✔ |
| | | | | | |

* HF = High-Flow

** IR = infrared data interface

Application

Fueling nozzle for H₂ fast filling of buses and trucks at self-service fueling stations.

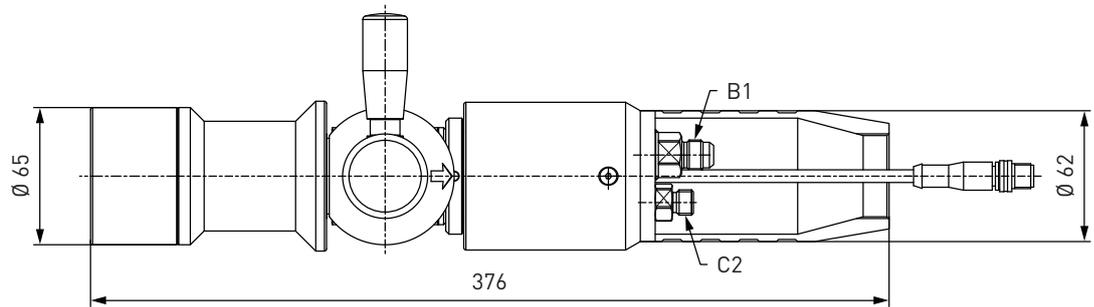
TECHNICAL DATA

| Characteristics | Basic version | Options |
|--------------------------------|---|--|
| Nominal bore (DN) | 8 mm | On request |
| Pressure range | PN = 35 MPa (5,000 psi) PS = 45 MPa | |
| Temperature range | -40 °C up to +85 °C (-40 °F up to +185 °F) | On request |
| Material | Corrosion resistant | On request |
| Sealing material | Hydrogen resistant | On request |
| Design | With plastic thermal protection, gas recirculation and data interface | On request |
| Weight | Approx. 2.4 kg (5.29 lbs.) | |
| Conformity / Tests / Approvals | SAE J2600:2002 Data interface: SAE J2601 / ATEX | Data interface: SAE J2601 / NEC Class 1 Zone 1 |

Ordering / Accessories

ORDERING | WEH® TK16 H₂ High-Flow Fueling nozzle with data interface

approx. dimensions (mm)



| Part No. | Description | Pressure (PN) | B1 (male thread) | C2 (male thread) |
|---------------------|-------------------------------|-----------------------|---------------------|---------------------|
| C1-94315-X01 | TK16 H ₂ High-Flow | 35 MPa / 5,000 psi | UNF 9/16"-18* | M12x1.5 |

* acc. to SAE J514, 37°

On request the TK16 H₂ High-Flow fueling nozzle with data interface is also available with registration acc. to NEC Class 1 Zone 1 (acc. to SAE J2601).

Fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling are available on request.

ACCESSORIES

The following accessories are available for the WEH® TK16 H₂ High-Flow Fueling nozzle with data interface:

Filling and venting hoses

Filling and venting hose for connecting fueling nozzle and TSA1 H₂ breakaway coupling, complete with hose fittings, plastic spiral hose and cable for data interface.

Design: max. operating pressure PS: 45 MPa (6,530 psi) / nominal bore (DN): 6.35 mm (filling hose) resp. 2 mm (venting hose)



| Part No. | B1/B2 (female thread) | C1/C2 (female thread) | Hose length |
|-----------------|--------------------------|--------------------------|-------------|
| C1-90698 | UNF 9/16"-18* | M12x1.5 | 3 m |
| C1-94428 | UNF 9/16"-18* | M12x1.5 | 4 m |
| C1-94429 | UNF 9/16"-18* | M12x1.5 | 5 m |

* acc. to SAE JIC, 37°

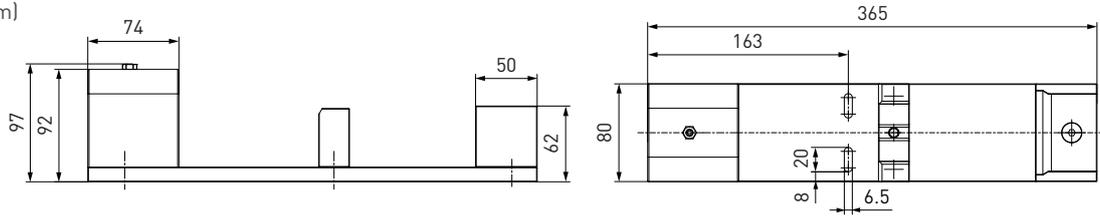
Accessories

Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Design: Aluminium, stainless steel

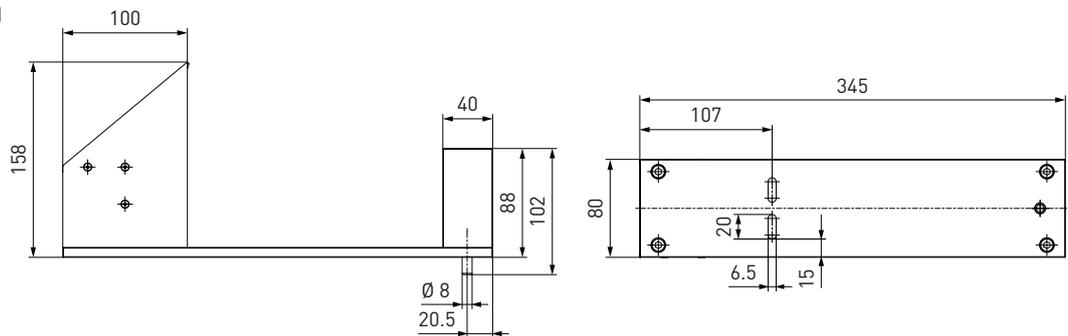
Not switch actuated mounting with protection of front sleeve

approx. dimensions (mm)



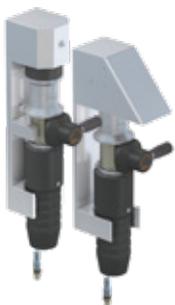
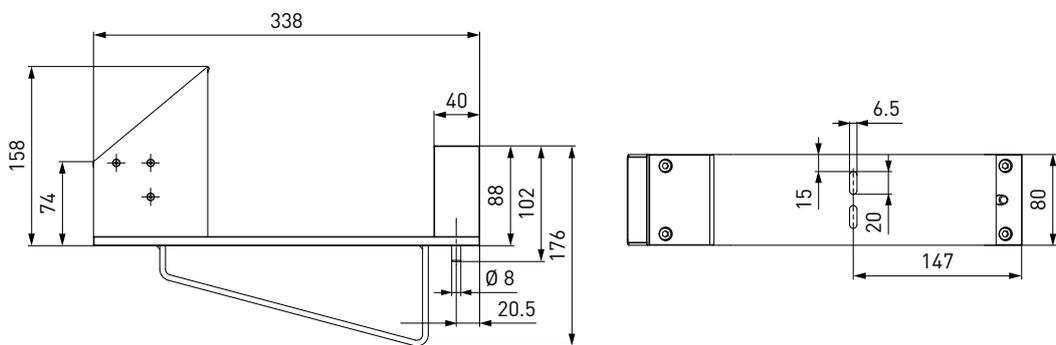
Switch actuated mounting with weather protection

approx. dimensions (mm)



Switch actuated mounting with weather protection and angle plate 15°

approx. dimensions (mm)



| Part No. | Description |
|-----------|--|
| C1-94671 | Mounting (not switch actuated) with protection of front sleeve |
| C1-90675 | Mounting (switch actuated) with weather protection |
| C1-114632 | Mounting (switch actuated) with weather protection and angle plate 15° |

Accessories / Spare parts

Fittings

Stainless steel fittings for connecting port 'B1' to the filling hose resp. the port 'C2' to the venting hose are available on request.

Data cable

Data cable for connecting controller and dispenser.

| Part No. | Description |
|-----------|-------------------|
| E68-96193 | Data cable 3.45 m |

SPARE PARTS

Various parts are available as spares for the WEH® TK16 H₂ High-Flow Fueling nozzle with data interface.



| Part No. | Description |
|-----------|-------------------|
| W72504 | 1 Actuation lever |
| E99-44923 | Maintenance spray |

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations and definitions of terms see Technical Appendix of the corresponding catalog or www.weh.com

Illustrations

The illustrations and/or images used in these data sheet are particularly provided for illustrative purposes only and may differ in some details from the actual product. For binding information, please refer to your individual orders.

Safe product selection

Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.

Service life

WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals - please refer to the respective operating instructions for the WEH® Product.

Explanation on the Pressure Equipment Directive

These WEH® Products are generally classified as pressure accessories in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. The assessment with regard to a different classification can, however, be made on request.

External change management

WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.

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» Contact

More questions? – Great! Don't hesitate to contact our experts.

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